

In the claims:

1. (Currently Amended) Method A computer implemented method for producing an orthosis model for a patient ~~[[,]]~~ comprising the steps of:

~~[[-]]~~ inputting patient data ~~(104)~~, corresponding to a curvature of the patient's spine with a data input device;

~~[[-]]~~ determining ~~(106)~~ a curvature type of the patient's spine ~~to be selected~~ from a predefined number of curvature types stored in a data base with a curvature determination device on the basis of the patient's data wherein the curvature type is defined by a number of points of deflection of an abstract spine and one or more directions of curvature of the abstract spine; and

~~[[-]]~~ selecting ~~(110)~~ at least one orthosis model from a predefined number of ~~orthoses~~ orthosis models with a model selection device on the basis of the determined curvature type ~~[[,]]~~ .

2. (Currently Amended) Method The computer implemented method according to claim 1, wherein ~~the patient's data contain one or more elements from the group of~~ said inputting step is further defined as:

inputting at least one of radiographs, photographs of ~~the~~ a back of the patient, static body dimensions of the patient, dynamic body dimensions of the patient, and age of the patient to the data input device.

3. (Currently Amended) Method The computer implemented method according to claim 1 ~~or 2~~, wherein ~~at least two orthoses models are selected~~, said selecting step is further comprising is further defined as:

~~[[-]]~~ selecting ~~(110)~~ an a plurality of orthosis model models ~~from the at least two orthoses models~~ in dependence on the patient's data.

4. (Currently Amended) ~~Method~~ The computer implemented method according to ~~one of the preceding claims, claim 1~~ further comprising the step of:

[[-]] obtaining (102) the patient's data corresponding to factors independent of the curvature of the spine.

5. (Currently Amended) ~~Method~~ The computer implemented method according to ~~one of the preceding claims, claim 1~~ further comprising the step of:

[[-]] modifying (112) the selected orthosis model according in response to the patient's data corresponding to factors independent of the curvature of the spine.

6. (Currently Amended) ~~Method~~ The computer implemented method according to claim [[4,]] 5 further comprising the steps of:

[[-]] adding the modified orthosis model to the predefined number of ~~orthoses~~ orthosis models in the data base.

7. (Currently Amended) ~~Method~~ The computer implemented method according to ~~according to one of the preceding claims, claim 6~~ further comprising the step of:

[[-]] producing (114) an orthosis mould according to one of the selected or and the modified orthosis model.

8. (Currently Amended) ~~Method~~ The computer implemented method according to claim [[6,]] 7 further comprising the step of:

[[-]] refinishing (116) the produced orthosis mould.

9. (Currently Amended) ~~Method~~ The computer implemented method according to claim [[6,]] 9 further comprising the steps of:

[[-]] reading in ~~(118)~~ the refinished orthosis mould with a reading-in device as an orthosis model; and

[[-]] adding ~~an~~ the orthosis model ~~according to the~~ read-in orthosis mould during said reading in step to the data base of having the predefined number of orthoses orthosis models.

10. (Currently Amended) ~~Method~~ The computer implemented method according to ~~according to one of the preceding claims, further comprising~~ claim 1 wherein said determining step includes the step of:

[[-]] ~~determining (108)~~ assigning a new curvature type ~~from~~ based on the patient's data; and

[[-]] adding the new curvature type to the predefined number of curvature types in the data base.

Cancel claims 11 – 14.

15. (Currently Amended) ~~Device~~ A computer implemented device for producing an orthosis model, comprising:

[[-]] a data input device ~~(6) designed for the input of the~~ inputting a patient's data corresponding to a curvature of the patient's spine;

[[-]] a data base ~~(12)~~ containing a number of curvature types and a number of orthoses orthosis models wherein each curvature type is defined by a number of points of deflection of an abstract spine and one or more directions of curvature of the abstract spine and wherein at least one orthosis model is associated with each curvature type;

[[-]] a curvature determination device (8) ~~designed~~ to determine a curvature type ~~in dependence and~~ on the basis of the patient's data corresponding to the curvature of the patient's spine; and

[[-]] an orthosis model selection device (10) ~~designed~~ to select at least one orthosis model from the said data base (12) ~~in dependence and~~ on the basis of the determined curvature type.

16. (Currently Amended) ~~Device~~ The computer implemented device according to claim 15, wherein the said data base (12) ~~comprises~~ is further defined as correlating said curvature types with said orthosis models with one of one-valued relationships or and many-valued allocations or relationships of curvature types to orthoses models, and wherein the said orthosis model selection device (10) is further defined as being operable suited to select at least one orthosis model on the basis of ~~these allocations~~ said relationships.

17. (Currently Amended) ~~Device~~ The computer implemented device according to claim ~~15 or~~ 16, wherein the said orthosis model selection device (10) ~~is suited to select~~ selects at least two ~~orthoses~~ orthosis models on the basis of said relationships, and wherein the said orthosis model selection device (10) ~~is further designed to select~~ selects one orthosis model from the said at least two ~~orthoses~~ orthosis models in dependence on the patient's data corresponding to a curvature of the patient's spine.

18. (Currently Amended) ~~Device~~ The computer implemented device according to ~~one of claims 15 to~~ claim 17, further comprising:

[[-]] a device (4) for obtaining the patient's data corresponding to factors independent of the curvature of the spine, wherein the device (4) ~~is designed to input~~ inputs the obtained patient's data into the said data input device (6).

19. (Currently Amended) ~~Device~~ The computer implemented device according to ~~one of claims 15 to~~ claim 18, further comprising:

[[-]] a data processing system (14), ~~wherein the data processing system (14) is~~
~~designed~~ operable to modify the selected orthosis model according to the patient's data
corresponding to factors independent of the curvature of the spine.

20. (Currently Amended) ~~Device~~ The computer implemented device according to ~~one of claims 15 to~~ claim 19, wherein the said data processing system (14) is ~~designed to add~~
adds the modified orthosis model to the predefined number of ~~orthoses~~ orthosis models in the
said data base (12).

21. (Currently Amended) ~~Device~~ The computer implemented device according to ~~one of claims 15 to~~ claim 20, wherein the said data processing system (14) is ~~designed to modify~~
modifies the ~~one-valued' or many-valued allocations of~~ curvature types and ~~orthoses~~ orthosis
models in the said data base (12) ~~or to newly generate such allocations, respectively,~~ .

22. (Currently Amended) ~~Device~~ The computer implemented device according to ~~one of claims 15 to~~ claim 21, further comprising:

[[-]] a shaping device (16), ~~wherein the shaping device (16) is designed to~~
~~produce~~ for producing an orthosis mould according to one of the selected ~~or~~ and modified
orthosis model.

23. (Currently Amended) ~~Device~~ The device according to ~~one of claims 15 to~~
claim 22, further comprising:

[[-]] a reading-in device (18) for reading in an orthosis mould , ~~wherein the~~
~~reading-in device (18) is designed to add~~ and adding an orthosis model according to the read-in
orthosis mould to the number of ~~orthoses~~ orthosis models in the data base (12).

24. (Currently Amended) ~~Device~~ The computer implemented device according to
~~one of claims 15 to claim~~ 23, wherein the said data processing system (14) ~~is designed to~~
~~determine~~ determines a new curvature type from the patient's data corresponding to a curvature
of the patient's spine and ~~to add~~ adds the new curvature type to the predefined number of
curvature types in the said data base (12).

Cancel claims 25 – 27.